U.S. Application Serial No.: 09/700,099

Filed: December 11, 2000

### REMARKS

### Status of the Claims

Applicants acknowledge receipt of the Office Action dated September 8, 2008. Claims 4-6, 9 and 11-24 are pending of which 16-24 have been withdrawn. New claims 26-33 are presented herein. Support for the new claims is found throughout the specification, including the Example on pages 15-16 of the specification as filed. Applicants also amend claim 4.

Finally, to place the claims in better condition for allowance, Applicants cancel the previously withdrawn claims. Thus, claims 16-25 now stand cancelled.

No new matter is presented. Reconsideration of the claims is earnestly solicited.

## Objection to Claim 4

The Examiner objected to claim 4 as being an unacceptable Markush group listing.

Applicant amends claim 4 to recite a proper Markush group thereby obviating the objection.

### Rejection of Claims 4-6, 9, 11, 13 and 15 Under 35 U.S.C. § 103(a)

Claims 4-6, 9, 13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,910,358 to Thoen. The Examiner contends that Thoen teaches a floor covering comprising a latex composition including a polyolefin binder mixture of interpolymers including ethylenes and alpha-olefins. The Examiner further contends that Thoen simply fails to teach the weight percentages recited in claims 4 and 9. The Examiner finally contends that a skilled artisan could determine the workable ranges and optimize the effects of the fillers by varying the amounts employed.

Claims 4-6, 9, 13 and 15 stand further rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,910,358 to Thoen in view of Schuppiser, or Pontiff or in view of Walton. The Examiner contends that it would have been obvious to one having ordinary skill in the art to have modified the flooring of Thoen including the (co-)/crosslinking agents as claimed because: 1) Schuiser allegedly teaches agents for crosslinking and processing of the polymer resulting in good water resistance for floor converings; 2) Pontiff teaches acrylic acid and methacrylic blended with ethylene or its copolymer with any compatible polymer, and 3) Walton allegedly teaches the same polyolefin ingredients crosslinked with components for effecting the melt index for use in coatings for foam structures.

Thoen, the primary reference, is directed to a resilient cushion foam flooring and wall covering product free of polyvinyl chloride (PVC) and plasticizers. These products comprise a

U.S. Application Serial No.: 09/700,099

Filed: December 11, 2000

thermoplastic top covering layer integrated with a latex or thermoplastic foam backing layer (see Field of the Invention – column 1, lines 5-11). The resilient foam backing layer consists of (1) a solvent dispersed polyolefin polymer; (2) a melt processed polyolefin polymer; or (3) a latex composition (see column 5, lines 45-47). The latex compositions are aqueous dispersions or emulsions comprising a latex and a water-soluble catalytic curing agent (see column 6, lines 1-3). Thoen discloses that at least one organic or polymeric filler such as high density polyethylene powder is added to the latex composition for improved resiliency and strength for polyolefin polymer substrate layers (see column 8, lines 40-47). However, Thoen teaches that the latex comprises a thermoplastic homopolymer or interpolymer which consists of at least one vinyl aromatic monomer and at least one diene, alpha-olefin, ethylene or substituted ethylene (see column 6, lines 3-7). Thus, the latex requires a vinyl aromatic monomer in addition to one diene, alpha-olefin, ethylene or substituted ethylene.

Contrary to Thoen, the polyolefin of claim 4 is free of vinyl aromatic monomers and, instead, recites a mixture of at least two ethylene copolymers, wherein the ethylene copolymer mixture comprises a copolymer (a) as the main polymer and a copolymer (b) to control rheology and elasticity. Accordingly, a prima facie case of obviousness has not been established because Thoen does not teach or even suggest every element of independent claim 4 and, thus, the rejection of claims 4-6, 9, 11, 13 and 15 should be withdrawn for at least this reason.

Further, in view of the amendments presented herein, neither Thoen or any of the secondary references cited by the Examiner, alone or in combination, teach or even suggest a polymer binder that exhibits the physical properties recited in claim 4 (or new claim 26). Obviousness requires a reasonable expectation of success. *In re Clinton*, 527 F.2d 1226, 1228 (CCPA 1976). In fact, both the expectation of success and suggestion must be founded in the prior art and not the applicant's disclosure. *In re Dow Chemical Co.*, 837 F.2d 469, 473 (1988). In the instant case, one of ordinary skill the art would not have expected the resulting binder to exhibit an indentation of 0.01 mm after 150 minutes according to EN 433 as shown in the example of the specification.

Still further, Thoen does not teach an ethylene copolymer mixture of a main polymer with a density of 0.89 – 0.91 g/cm³ and a copolymer (b) to control rheology and elasticity with a density of 0.86 – 0.88 g/cm³ and a melt flow index (MFI) > 3. Applicants respectfully submit that the Examiner has incorrectly assumed that the densities and melt flow indices are inherent properties because the foam taught by Thoen and the flooring binder recited in claim 4 are, in fact, not of the same basic composition.

U.S. Application Serial No.: 09/700,099

Filed: December 11, 2000

Respectfully, Applicants request that the rejection of claims 4-6, 9, 11, 13 and 15 under 35 U.S.C. § 103(a) in view of Thoen, alone or in combination with Schuppiser, Pontiff or Walton be withdrawn, and these claims allowed for at least this additional reason.

#### Rejection of Claims 14-15 Under 35 U.S.C. § 103(a)

Claims 14-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Thoen in view of Schuppiser, Pontiff, and Walton, in further view of Scarlette. With respect to claim 14, the Examiner notes that Thoen fails to teach a mixture of filler comprising mineral intergrowths. The Examiner contends, however, that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the floor covering of Thoen to utilize a filler mixture of platelet-shaped and crystalline mineral intergrowths because Scarlette allegedly teaches such an alumina filler enhances physical properties and abrasion resistance without compromising flexibility, hardness and adhesion. With respect to claim 15, the Examiner contends that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the floor covering of Thoen with pigments in a design and mineral intergrowth filler of a homogenous construction since it is allegedly known that such a mixture provides decorative color and an effective filler for the flooring to provide for a consistent composition for the flooring.

As noted above, the rejection of claim 4, from which claims 14 and 15 depends, is improper and must be withdrawn. Applicants also note that neither Thoen nor Scarlette, either alone or in combination, offer any suggestion, and provide no motivation, to use an ethylene copolymer mixture which comprises a copolymer (a) as the main polymer and a copolymer (b) to control rheology and elasticity. Furthermore, Thoen or Scarlette, either alone or in combination, do not teach or even suggest a flooring having a polyolefin capable of exhibiting the recited physical characteristics, namely containing a main polymer with a density of 0.89 – 0.91 g/cm³ and a copolymer (b) to control rheology and elasticity with a density of 0.86 – 0.88 g/cm³ and a melt flow index (MFI) > 3, much less an unexpected indentation of 0.01 mm after 150 minutes according to DIN EN 433. Thus, even if one of ordinary skill in the art at the time of the invention had modified the floor covering of Thoen with pigments in a design and a mixture of platelet-shaped and crystalline mineral intergrowths, the resulting invention would still fall short of yielding a flooring having the binder as recited in claim 4.

Accordingly, Thoen and Scarlette, either alone or in combination, do not teach or suggest every element of the claimed invention. Respectfully, Applicants request that the

U.S. Application Serial No.: 09/700,099

Filed: December 11, 2000

rejection of claims 14-15 under 35 U.S.C. § 103(a) over the combination of Thoen and Scarlette, be withdrawn, and these claims be allowed.

U.S. Application Serial No.: 09/700,099

Filed: December 11, 2000

# CONCLUSION

In view of the above amendments and remarks, Applicants respectfully assert that the rejection of the claims as set forth in the Office Action has been addressed and overcome. Applicants further assert that all claims are in condition for allowance and requests that an early notice of allowance be issued.

If the Examiner believes any informalities remain in the application that can be resolved by telephone interview, a telephone call to the undersigned attorney is requested. Applicants reserve the right to subsequently take up prosecution of the claims originally filed in this application in continuation, continuation-in-part, and/or divisional applications.

A fee for a one-month extension of time is submitted contemporaneously herewith. No additional fees are believed due, however, the Commissioner is hereby authorized to charge any deficiencies which may be required, or credit any overpayment, to Deposit Account Number 09-0528 (D078 1090).

Respectfully submitted.

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